AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Previously Presented) A system for gastric stimulation of a patient comprising:

a plurality of sensing electrodes for sensing intrinsic gastric activity from a stomach wall of a patient;

an implantable gastric stimulator coupled to the plurality of sensing electrodes, the implantable gastric stimulator receiving the sensed intrinsic gastric activity and performing an analysis of the sensed intrinsic gastric activity and determining whether to create an electrical stimulation based at least in part upon the analysis of the sensed intrinsic gastric activity;

a plurality of stimulation electrodes for conveying the electrical stimulation from the implantable gastric stimulator to the stomach wall of the patient, the electrical stimulation for disrupting normal gastric activity of the stomach.

2. (Original) A system as recited in claim 1, further comprising one or a plurality of elongated lead body sheaths having proximal end connectors for coupling said stimulation and sensing electrodes with said implantable gastric stimulator, portions of said stimulation and sensing electrodes extending through the elongated lead body sheaths to their distal end, the distal end of the elongated lead body sheaths for electrical communication with the stomach wall of the patient and for positioning said stimulation and sensing electrodes on or in the stomach wall.

3. (Original) A system as recited in claim 1, wherein said plurality of the stimulation and sensing electrodes are positionable at different locations of the stomach wall.

4. (Previously Presented) A system as recited in claim 1, wherein the implantable gastric stimulator further comprises a radio frequency telemetry transceiver provided for communication with a remote programmer.

5. (Original) A system as recited in claim 1, wherein said implantable gastric stimulator comprises a programmable microprocessor or microcontroller.

6. (Original) A system as recited in claim 1, wherein the stimulator may temporarily revert to a power conserve condition at programmable times of the day.

7. (Previously Presented) A system as recited in claim 1, wherein said sensing electrodes communicate the sensed intrinsic gastric activity to the implantable gastric stimulator for identifying at the implantable gastric stimulator an interval, an amplitude, and a duration of the sensed intrinsic gastric activity.

8. (Previously Presented) A system as recited in claim 7, wherein said sensing electrodes communicate the sensed intrinsic gastric activity to the implantable gastric stimulator for identifying at the implantable gastric stimulator a frequency spectrum of the sensed intrinsic gastric activity.

9. (Previously Presented) A system as recited in claim 8, wherein the stimulator analyzes the sensed intrinsic gastric activity and classifies the sensed intrinsic gastric activity as slow wave or peristaltic wave.

10. (Previously Presented) A system as recited in claim 9, wherein the stimulator analyzes the sensed intrinsic gastric activity and classifies the activity as normal or abnormal.

11. (Original) A system as recited in claim 10, wherein the stimulator may temporarily revert to a power conserve condition in the absence of a programmable threshold of normal electrical activity.

12. (Previously Presented) A system as recited in claim 11, wherein the stimulator delivery of electrical stimulation is triggered by electrical activity classified as a plurality of normal events.

13. (Previously Presented) A system as recited in claim 12, wherein the stimulator is programmed to deliver electrical stimulation on all or a percentage of the plurality of normal events.

14. (Previously Presented) A system as recited in claim 13, wherein the electrical stimulation is delivered across the sensed intrinsic gastric activity.

15. (Previously Presented) A system as recited in claim 13, wherein the electrical stimulation is delivered with a spatial offset to the sensed intrinsic gastric activity.

16. (Previously Presented) A system as recited in claim 13, wherein the electrical stimulation is delivered with a temporal offset to the sensed intrinsic gastric activity.

17. (Original) A system as recited in claim 13, wherein the electrical stimulation is delivered in anticipation of the next normal electrical activity.

18. (Previously Presented) A system as recited in claim 13, wherein a temporal offset is programmable by a user.

19. (Previously Presented) A system as recited in claim 13, wherein a temporal delivery of the electrical stimulation is adaptable based upon an algorithm considering a running history of recent predecessor electrical activity events.

20. (Previously Presented) A system as recited in claim 19, wherein the polarity of the stimulation electrodes is programmable by a user at the stimulator allowing stimulation between a single pair or a plurality of electrodes.

21. (Previously Presented) A system as recited in claim 20, wherein the stimulator is programmed to switch the polarity of one or a plurality of the various stimulation electrodes to accommodate multiphase stimulation.

22. (Original) A system as recited in claim 21, wherein the electrical stimulation comprises one or a plurality of biphasic pulses programmable within the following parameters, comprising:

pulse amplitude between 0.0 to 15 V or 0.0 to 15 mA;

pulse width between 20 msec to 500 msec;

pulses per event between 1 and 5; and

first phase width between 25 to 100 percent of pulse width.

23. (Previously Presented) A system as recited in claim 22, wherein the stimulator comprises an array, the array comprising two or more capacitors, and the pulse width is accommodated by switching between the two or more capacitors in the array.

24. (Original) A system as recited in claim 23, wherein the electrical stimulation comprises an alternating polarity pulse train programmable within the following parameters, comprising:

pulse amplitude between 0.0 to 15 V or 0.0 to 15 mA;

pulse width between 100 μsec and 750 μsec;

pulses per second (frequency) between 10 to 120 Hz; and

duration of pulse train between 0.5 and 30 seconds.

25. (Original) A system as recited in claim 24, wherein the stimulator comprises a memory and the parameters comprising quantities, interval frequency, duration, and amplitude for the sensed events and quantities of paced events are stored in memory for subsequent recall.

26. (Previously Presented) A system as recited in claim 25, wherein the sensed intrinsic gastric activity can be telemetered from the implantable gastric stimulator to an external programmer to assist in establishing the appropriate stimulation parameters.

27. (Previously Presented) A system as recited in claim 1, wherein the stimulator incorporates at least one independently programmable stimulation channels coupled to the plurality of stimulation electrodes, and at least one independently programmable sensing channels coupled to the plurality of sensing electrodes.

28. (Original) A system as recited in claim 27, wherein at least one stimulation channel is programmable to parameters associated with nerve stimulation.

29. (Previously Presented) A method for gastric stimulation of a patient comprising:

sensing the intrinsic gastric activity on the stomach wall of a patient;

determining when to apply electrical stimulation to the stomach walls of the patient based upon the sensed intrinsic gastric activity;

forming an electrical signal in response to the determining; and

disrupting normal gastric activity of the stomach with the electrical signal.

30. (Original) The method of claim 29 further comprising maintaining a history of predecessor electrical events.

31. (Previously Presented) The method of claim 29 further comprising analyzing the sensed intrinsic gastric activity and classifying the sensed intrinsic gastric activity as slow wave or peristaltic wave.

32. (Previously Presented) The method of claim 29 further comprising analyzing the sensed intrinsic gastric activity and categorizing the activity as normal or abnormal.

33. (Original) The method of claim 32 wherein the step of determining determines a percentage of normal events and step of disrupting applies the electrical signal for the percentage of electrical events.

34. (Currently amended) The ~~system~~ method of claim 32, wherein the step of disrupting is triggered by electrical activity classified as normal.